CLAIMS

What is claimed is:

1. A method of using a storage module in a device comprising:

receiving data in the device;

identifying a code in the data;

replacing the code in the data with corresponding terms in the storage module, prior to displaying the data.

2. The method of claim 1, further comprising:

periodically updating data in the storage module.

3. The method of claim 1, further comprising:

periodically replacing the storage module in the device to contain an often-used set of terms.

4. The method of claim 1, wherein a term may comprise one or more of the following: a word, a phrase, a graphic element, an image, graphic animation sequence, video clip, sound clip, applet, or a binary large object (BLOB).

5. The method of claim 1, further comprising:

storing a plurality of code-term pairs in the storage module; and

inserting the storage module into the device.

6. The method of claim 1, wherein the data is received in the device over a low bandwidth wireless connection.

7. The method of claim 1, wherein the storage module is a device selected from among the following: a Flash memory, a Clik! disk, an EEPROM, a magnetic storage device, an IBM MicroDrive, and an optical storage device.

8. The method of claim 1, further comprising:

gathering statistics about a frequency of occurrence of each code in the storage module.

9. The method of claim 8, further comprising:

transmitting the statistics to a central mechanism for updating contents of the storage module.

10. A service provider for providing data to a device via a low bandwidth connection, the service provider comprising:

a database including a plurality of codes and associated terms;

a substitution logic to replace a term in the data with a code; and

a transmission logic to transmit the data including the code.

11. The service provider of claim 10, further comprising:

a statistic gathering logic to gather statistics about a frequency of occurrence of each terms in the data.

12. The service provider of claim 11, further comprising:

an analyzing logic to analyze statistics and determine a set of useful terms for inclusion in the database.

13. The service provider of claim 12, further comprising:

a storage module updating unit to generate an updated data set for the database and for a storage module.

14. The service provider of claim 10, wherein the data in the database is periodically updated.

15. A portable device comprising:

a low bandwidth connection to a network to receive data;

a storage module including a plurality of codes and associated data;

a substitution logic for detecting the codes in the received data and substituting the associated data for each of the codes;

such that the bandwidth of data transferred over the low bandwidth connection is reduced by transmitting the codes instead of the associated data.

16. The portable device of claim 15, wherein the low bandwidth connection is a wireless connection.

17. The portable device of claim 15, wherein the storage module is a built-in device.

18. The portable device of claim 15, wherein the storage module is a removable device.

19. The portable device of claim 18, wherein the storage module comprises a storage module selected from among the following: a Flash memory, a Clik! disk, an EEPROM, a magnetic storage device, an IBM MicroDrive, and an optical storage device.

20. The portable device of claim 15, further comprising a statistic collection logic for identifying which of the codes are used.

21. The portable device of claim 20, wherein the data in the storage module is updateable, such that based on the statistics collected by the statistics collection logic the contents of the storage module are periodically updated.

22. A system comprising:

a first device having a low bandwidth connection to a network, the first device including a storage module;

a second device for preparing data for display on the first device;

the second device including a copy of data on the storage module, the second device replacing data sent to the first device with codes, if the data is in the storage module;

whereby the bandwidth used for transmitting the data to the first device is reduced.

SUB A4

ADD A5